

**Notice of Allowability**

Application No.

10/614,834

Applicant(s)

YASUNAGA ET AL.

Examiner

Angela A. Armstrong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Request for Continued Examination filed 9/11/07.
2. ☒ The allowed claim(s) is/are 2,4-7,9-12 and 14-37.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☒ Certified copies of the priority documents have been received in Application No. 09/319,933.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joshua Povsner on October 30, 2007.

The application has been amended as follows:

Where deleted matter is shown as ~~strike through~~ and added matter is shown as underlined.

#### **In the claims:**

21. (Currently Amended) A dispersed pulse vector generator used for a speech coder/decoder, comprising:

a pulse vector generator for generating pulse vectors having a signed unit pulse;

a dispersion pattern selector for determining a subset of dispersion patterns from a plurality of fixed dispersion patterns and for selecting a dispersion pattern, from the subset of dispersion patterns, to be convoluted with a pulse vector;

a dispersed pulse vector generator for generating a dispersed pulse vector by convoluting the pulse vector and the selected dispersion pattern.

26. (Currently Amended) A dispersed pulse vector generator used for a speech coder/decoder, comprising:

a pulse vector generator for generating pulse vector having a signed unit pulse;

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a dispersion pattern component for providing a plurality of fixed dispersion pattern;  
means for selecting a subset of dispersion patterns from the plurality of fixed dispersion patterns;  
means for determining a dispersion pattern from the subset of dispersion patterns to be convoluted with a pulse vector; and  
a dispersed pulse vector generator for convoluting the pulse vector and the selected dispersion pattern.

30. (Currently Amended) A dispersed pulse vector generator used for a speech coder/decoder, comprising:

a pulse vector generator configured to generate a pulse vector having a signed unit pulse;  
a dispersion pattern component configured to provide a plurality of fixed dispersion patterns;  
a first selector that selects two or more dispersion patterns of the plurality of fixed dispersion patterns with reference to an adaptive codebook gain;  
a second selector that identifies a dispersion pattern from two of more dispersion patterns to be convoluted with the pulse vector; and  
a dispersed pulse vector generator configured to generate a dispersed pulse vector by convoluting the pulse vector and the selected dispersion pattern.

36. (Currently Amended) A method of generating a dispersed pulse vector used for a speech coder/decoder, comprising:

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providing a pulse vector having a signed unit pulse;  
providing a plurality of fixed dispersion patterns;  
pre-selecting a set of dispersion patterns from the plurality of fixed dispersion patterns;  
selecting a dispersion pattern from the set of dispersion patterns to be convoluted with the pulse vector; and  
convoluting the pulse vector and the selected dispersion pattern.

37. (Currently Amended) A method of generating a dispersed pulse vector used for a speech coder/decoder, comprising:

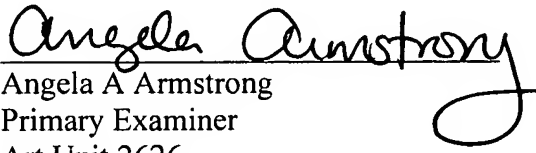
providing a pulse vector having a signed unit pulse;  
selecting two or more dispersion patterns from a sorted set of fixed dispersion patterns, wherein the plurality of fixed dispersion patterns are sorted according to characteristics of each of the plurality of fixed dispersion patterns;  
selecting a dispersion pattern from the sorted dispersion patterns to be convoluted with the pulse vector; and  
generating a dispersed pulse vector by convoluting the pulse vector and the selected dispersion pattern.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 571-272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Angela A Armstrong  
Primary Examiner  
Art Unit 2626

AAA  
October 30, 2007